lights. The experiment, carried out on 18 October 1962 in the middle latitudes of the European USSR at a solar elevation of 12°45', was for the purpose of testing a new method of measuring corpuscular radiation. The measuring instrument had as its main element an open-type secondary-electron multiplier developed by the Vavilov State Optical Institute and installed in the new SF-type corpuscular-radiation recorder. Two protective rings at a potential difference of +12 and -12 v were placed before the input orifice to exclude the charged particles of the ionosphere. The multiplier was evacuated to about 10^{-5} mm Hg before the launch. The time resolution of the system in two frequency ranges was 50 to 100 μsec; the time constant

Card 1/3

ACCESSION NR: AP5005437

of the output integrating RC cells was 5×10^{-3} sec. (In later investigations the multiplier's time resolution was improved to 10 μsec and the amplification factor increased to 2000—5000.) The SF recorder was placed in a separable container of a high-altitude automatic geophysical station provided with stabilizing and orientation control systems. The apparatus was stabilized with respect to the vertical and rotated around it with a gradually lengthening period from 7 to 12 sec, which made it possible to analyze the angular distribution of electron velocities with respect to the magnetic force line. The dispersion of recorded points caused an error in individual measurements of the order of 30% at counting speeds of about 400 pulse/sec. Periodic signal peaks at certain angles of rotation were found to [illegible] scattered sunlight in the instrument as it passed through the solar

400 pulse/sec. Periodic signal peaks at certain angles of rotation [illegible] be caused by dispersed sunlight in the instrument as it passed through the solar meridian. All filters yielded relatively high and equal readings, which indicated the presence of intense background noise. The noise background, which decreased with altitude and changed with the angular position of the container with respect to the sun, also displayed some irregularities. Despite these disturbing factors, corpuscular signals could be discerned from the background. The intensity of the signals did not depend on altitude. Later investigations (Kosmicheskiye issledovaniya, v. 3, no. 1, 1965, 89) revealed some irregularities, but no pronounced dependence of radiation intensity on altitude was demonstrated. On the average, the full flux of corpuscles in the flow of electrons was found to be about

Card 2/3

L 32030-65
ACCESSION NR: AP5005437

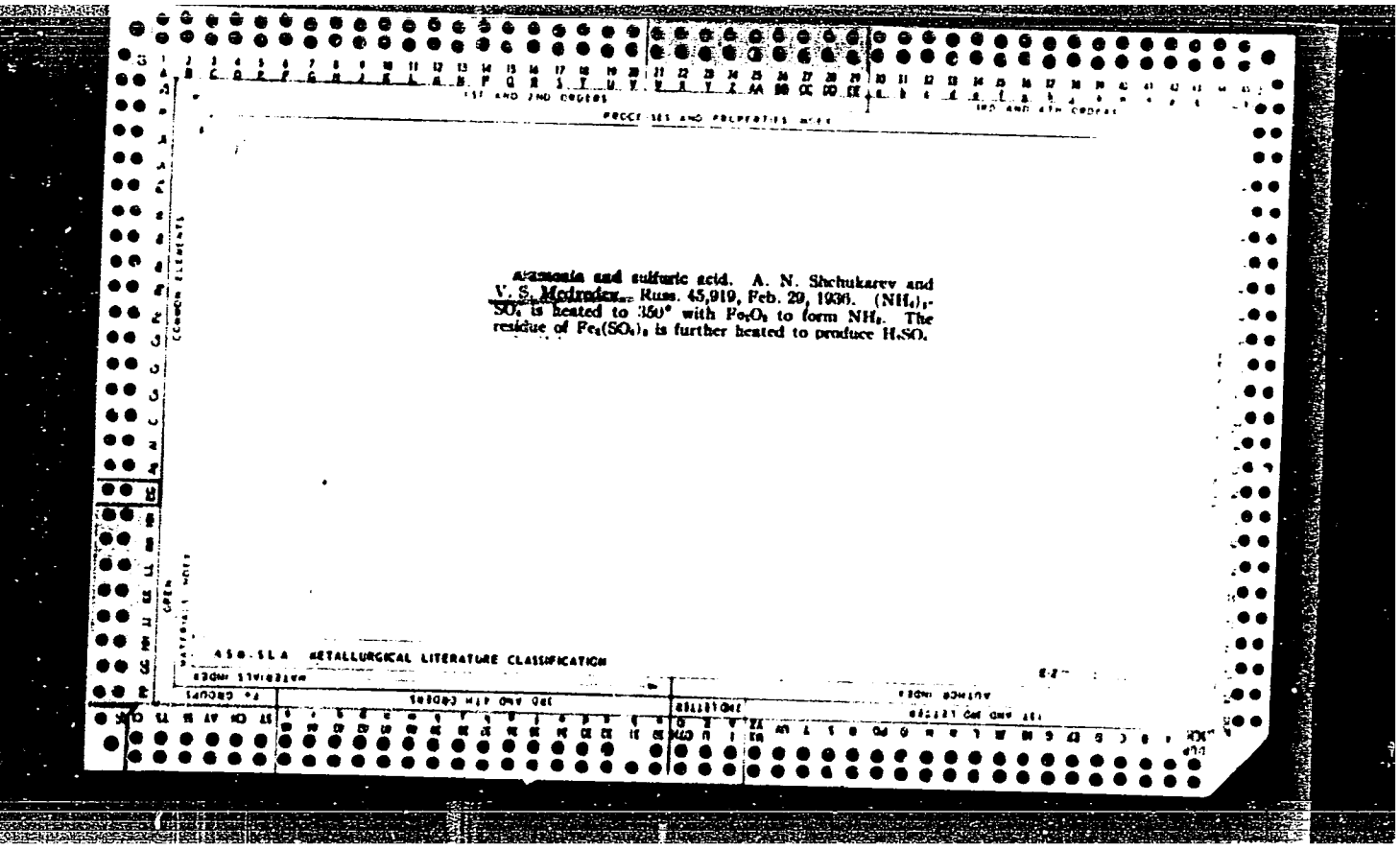
5×10^7 cm^{-2} sec^{-1} $sterad^{-1}$ and did not depend on the angle with the plane perpendicular to the magnetic force line within the limits of ±30°. Other filters yielded useful signals which were used to plot an energy spectrum of the flux. Orig. art. has: 3 figures. [FP]

ASSOCIATION: none

SUBMITTED: 09Dec63 ENCL: 00 SUB CODE: AA, ES

NO REF SOV: 011 OTHER: 002 ATD PRESS: 3199

Card 3/3



Ammonia and sulfuric acid. A. N. Shchukarev and V. S. Modrzejewska. Russ. 45,919, Feb. 29, 1936. $(NH_4)_2SO_4$ is heated to 350° with Fe_2O_3 to form NH_3. The residue of $Fe_2(SO_4)_3$ is further heated to produce H_2SO_4.

CA

3

Large-scale investigation of organic crystal spectra at low temperature. V. A. Broude, V. C. Malyshev, N. E. Nechaeva, A. F. Prikhot'ko, and O. P. Kharitonova. *Izvest. Akad. Nauk S.S.S.R., Ser. Fiz.* 14, 487–92(1950). — Improvements in the method are the use of metallic cryostats with glass or quartz windows, of a high-pressure Kr lamp as light source, and of the Fe-arc spectrum as a comparison. Absorption spectra in polarized light could be taken on sep. small monocrystals selectively enlarged out of a conglomerate of crystals. At liquid-N temp. the absorption bands are narrowed. More than 50 substances were investigated. The characteristic frequencies of the C_6H_6 spectrum remain in the spectra of related substances, but these show individual characteristics; for example *p*-, *o*-, and *m*-xylene have distinctly different spectra. At low temp. all the benzene derivs. can be identified better than in solns. Phenol spectra are continuous and shifted to the red. The NO_2 and NH_2 groups also strongly modify the benzene spectrum; a more-detailed structure of aniline and nitrobenzene spectra was obtained at liquid H temp. Other investigated spectra belonged to heterocyclic substances, glycine, alanine, quinones, etc. Changes in spectra are due to changes in mol. structure and to changes in lattice bonds. The study of the naphthalene spectrum led to the following conclusions: All lines and bands can be classified in series corresponding to electronic transitions, intermol. vibrations and lattice vibrations. In the spectra of mol. crystals next to series of lines corresponding to lines in the gas phase also appear series, lines, and bands characteristic of the crystal alone; these series are strongly polarized. S. Paksver

1951

MEDVEDEV, V. S.

Broude, V. L., Medvedev, V. S., Prikhot'ko, A. F. Electronic and vibrating levels of the molecule and of the benzole crystal. P. 665.

Institute of Physics
Academy of Sciences, Ukrainian SSR
July 20, 1950

SO: Journal of Experimental and Theoretic Physics, Vol. 21, No. 6, June 1951

MEDVEDEV, V. S.

PA 245T94

245T94

USSR/Physics - Photoconductivity 11 Oct 52

"Photoresistances of CdS Monocrystals and Their Photoactivation," V. Ye. Lashkarev, Acting Mem, Acad Sci Ukrainian SSR, V. S. Medvedev, A. I. Skopenko, G. A. Fedorus, M. K. Sheynkman, Inst of Phys, Acad Sci USSR

"Dok Ak Nauk SSSR" Vol 86, No 5, pp 905-907

At 7th Conference of Semiconductors in 1950 (cf. Lashkarev et al., "Iz AN SSSR, Ser Fiz" 16, 81 (1952)) photoactivity of CdS monocrystals was reported activated by light. Show that photoresistance of CdS is only one exhibiting, in addition to high sensitivity, practically horizontal spectral characteristics within band 0.4 to 0.21μ. Received 5 Aug 52.

MEDVEDEV, V. S.

Structure of the molecule of dimers of anthracene and its homologous substances. V. S. Medvedev, B. M. Mikhailov, A. P. Prikhot'ko, and O. P. Kharitonova. *Izvest. Akad. Nauk S.S.S.R., Ser. Fiz.* 17, 715–16(1953).—Pure 9-methylanthracene (m. 79.5–80.5°) was transformed into its dimer (m. 228–228.5°) by irradiation of its acetone soln. by a Hg arc-lamp and recrystn. Absorption spectra of the crystals show 2 electronic transitions. The first series of broad absorption bands begins with a strongly polarized triplet λ = 3990.1; 4004.5; 4030.5 A.; the second series has a long-wave limit of absorption at λ = 2560 A. for one polarization and 2600 A. for the other. This spectrum is entirely different from the monomer spectrum. The photochem. reaction takes place not only in soln. but also by irradiation of monomer crystals; it can be detd. by the loss of birefringence. The transformation is effected by a change in the valence bond which leads to a configuration similar to that of hydrated anthracene derivs. The aromatic structure is lost in the central ring. S. Pakswer

5

AF 11-10-54

Inst Physics, AS UkrSSR

MEDVEDEV, V.S.

BRODIN, M.S.; MEDVEDEV, V.S.; PRIKHOT'KO, A.F.

Cryostats used in Jamin interferometry at liquid hydrogen temperatures. Prib.i tekh.eksp.no.3:96-98 M-D '56. (MLRA 10:2)

1. Institut fiziki AN USSR.
(Interferometry) (Cryostat)

BABENKO, V.P.; BROUDO, V.L.; MEDVEDEV, V.S.

Cryostats used in optical measurements. Prib.i tekh.eksp.no.3:99-100 M-D '56. (MLRA 10:2)

1. Institut fiziki AN USSR.
(Cryostat) (Optical measurements)

MEDVEDEV, V.S.

24(7) PHASE I BOOK EXPLOITATION SOV/1365

L'vov. Universytet

Materialy X Vsesoyuznogo soveshchaniya po spektroskopii. t. 1: Molekulyarnaya spektroskopiya (Papers of the 10th All-Union Conference on Spectroscopy. Vol. 1: Molecular Spectroscopy) [L'vov] Izd-vo L'vovskogo univ-ta, 1957. 499 p. 4,000 copies printed. (Series: Its: Fizychnyy zbirnyk, vyp. 3/8/)

Additional Sponsoring Agency: Akademiya nauk SSSR. Komissiya po spektroskopii. Ed.: Gazer, S.L.; Tech. Ed.: Saranyuk, T.V.; Editorial Board: Landsberg, G.S., Academician (Resp. Ed., Deceased), Neporent, B.S., Doctor of Physical and Mathematical Sciences, Fabelinskiy, I.L., Doctor of Physical and Mathematical Sciences, Fabrikant, V.A., Doctor of Physical and Mathematical Sciences, Kornitskiy, V.G., Candidate of Technical Sciences, Rayskiy, S.M., Candidate of Physical and Mathematical Sciences, Klimovskiy, L.K., Candidate of Physical and Mathematical Sciences, Milyanchuk, V.S., Candidate of Physical and Mathematical Sciences, and Glauberman, A. Ye., Candidate of Physical and Mathematical Sciences.

Card 1/30

PURPOSE: This collection of articles is intended for scientists working in the field of spectroscopy and for engineers and laboratory analysts who use spectroscopic methods in their work.

COVERAGE: This collection of articles is concerned with theoretical, experimental, and technical problems in molecular spectroscopy. The application of molecular spectroscopy to various fields of theoretical research is described in articles covering chemical structure, kinetics, catalysis, theory of the chemical bonding, properties of crystals, effect of radiation on substance, etc. Good coverage is also given to the use of spectroscopy in organic and inorganic technology including the study of petrochemicals, polymers, glass, phosphate, boron compounds, etc. Each article is followed by references. The text includes tables and figures.

TABLE OF CONTENTS:

Medvedev, V.S.

AUTHORS: Broude, V.L., Medvedev, V.S. and Prikhot'ko, A.F. 51-3-6/24

TITLE: Spectral investigation of benzene crystals at 20.4°K. (Spektral'nye issledovaniya kristallov benzola pri 20.4°K).

PERIODICAL: "Optika i Spektroskopiya" (Optics and Spectroscopy), 1957, Vol.2, No.3, pp.317-322 (U.S.S.R.)

ABSTRACT: The present authors studied earlier (Zh. Eksper.Teor. Fiz., Vol.21, p.665, 1951 and Vol.22, p.605, 1952) benzene monocrystals in polarized light at the liquid nitrogen temperature. They found then that a purely electronic transition forbidden in the benzene molecule occurred in benzene crystals as a resolved doublet with its components polarized along the a and c axes of the crystals. This doublet was shown by Davydov (Zh. Eksper. Teor. Fiz., Vol.21, p.671, 1951) to be due to formation of free excitons in the crystal. This paper deals with absorption spectra of benzene monocrystals at the liquid hydrogen temperature. The apparatus included a spectrograph with 2.9 Å/mm dispersion at about 2600 Å. An Iceland spar polarizer was used with a special diaphragm to make possible recording of two spectral components simultaneously. Liquid benzene was poured into a special cell and held in a cryostat which permitted rotation of the cell. New samples could be introduced during work.

Card 1/3

Spectral investigation of benzene crystals at 20.4°K. (Cont.)

51-3-6/24

Preliminary cooling was carried out with liquid nitrogen and in the final cooling only 30-40 cm^3 of liquid hydrogen were lost per hour. The absorption spectrum of benzene monocrystals at 20.4 K consists of more than 100 narrow (2-4 cm^{-1}) bands. The spectrum begins at 37800 cm^{-1} and the plates in the paper show bands up to about 41000 cm^{-1}. The spectrum of the benzene crystal consists of two basic series: the K series strongly polarized bands which are related to the fully symmetric vibrations of the benezene molecule and the M series, more intense, whose beginning occurs when a purely electronic transition is combined with vibrations of E_{2g} symmetry (523 cm^{-1}). The K series occurs in crystals only and is called "crystalline", while the M series occurs also in gases and hence is called "molecular". The K series consists of six groups each of which contains 3 or more bands. The M series consists of four groups each of which has 3 main weakly polarized components and less intense satellites. There are also further bands which are strongly polarized but of low intensity, denoted by K^I ... K^{VII} whose components are very close together (2 to 10 cm^{-1}). Interpretation of the origin of these bands requires further work.

Card 2/3

Spectral investigation of benzene crystals at 20.4 K (Cont.)
51-3-6/24

There are 2 line figures, 1 plate with spectra and 11 references, 6 of which are Slavic.

SUBMITTED: August 23, 1956.

ASSOCIATION: Institute of Physics, A.C. of Ukrainian SSR, Kiev. (Institut Fiziki Akademii Nauk USSR g. Kiev).

AVAILABLE:

Card 3/3

MEDVEDEV, V. S.

AUTHOR: Medvedev, V.S. 120-5-24/35

TITLE: Automatic Spectrometer for the Visible and Ultra-violet Regions of the Spectrum (Avtomaticheskiy spektrofotometr dlya vidimoy i ul'trafioletovoy oblastey spektra)

PERIODICAL: Pribory i Tekhnika Eksperimenta, 1957, No.5 pp100- 105 (USSR)

ABSTRACT: This instrument plots the absorption spectrum of a sample as the logarithm of intensity ratio on a pen recorder with calibrated vertical and horizontal scales. Two sources of light (incandescent tungsten or hydrogen discharge) are deflected by spherical mirrors and mixed in a partially-reflecting quartz plate to form parallel beams each containing 12% and 88%, respectively, of each source of light. The beams, called I_o and I, are passed through the control and sample under test. A third source, a low-pressure mercury vapour lamp, type ПРК-4, with line spectrum, forms a calibrating beam parallel to the other two and is called I_{comp}. The 3 beams are chopped by a rotating perforated disc. The beam I is modulated at 75 c.p.s., I_o at 175 c.p.s. and I_{comp} at 850 c.p.s. The beams are combined by a further system of mirrors and passed through the slit of a production type

Card 1/3

Automatic Spectrometer for the Visible and Ultra-violet Regions of the Spectrum.

spectrograph ИСП-22 used as monochromator. The essential alignment and scanning mechanisms of this instrument are shown in Fig. 3. The scan period is adjustable between the limits 30 and 120 sec. The block diagram of the complete apparatus is that of Fig. 1 with the mirror system in more detail in Fig.2. The monochromator feeds a photomultiplier type ФЭУ-18 whose output is amplified in three narrow-band amplifiers whose selectivity is provided by feedback in parallel-T CR circuits. The circuit diagram with component values is shown in Fig. 4 and response curves of the amplifiers in Fig.5. The circuit for taking logarithms is similar to that due to Schaeffer and Wood (Ref.10), uses germanium diodes and is cooled by a fan. The effective range of this circuit is from 30 mV to 6 V. Each amplifier is supplied from a separately decoupled source. The output of the apparatus is taken both to a recording potentiometer ЭПП-09 and, for preliminary examination and monitoring, to a cathode-ray oscillograph with a type 23Л М34 tube having an afterglow of about 2 min. Fig. 6 shows an absorption spectrum taken of a solution of anthracene in ethyl alcohol. The slit width was 0.05 mm. The wavelength calibration marks will be noted on the lower trace.

120-5-24/35

Automatic Spectrometer for the Visible and Ultra-violet Regions of the Spectrum.

The oscillograph was constructed by D.G.Rotenberg, A.F. Prikhot'ko and M.D. Borisova also took part in the work.
There are 6 figures and 10 references, 2 of which are Slavic.

ASSOCIATION: Institute of Physics Ac.Sc. Ukrainian SSR (Institut Fiziki AN USSR)

SUBMITTED: March 18, 1957.

AVAILABLE: Library of Congress.

Card 3/3

BROUDE, V.L.; YEREMENKO, V.V. [IEremenko, V.V.]; MEDVEDEV, V.S.; PAKHOMOVA, O.S.; PRIKHOT'KO, A.F.

Effect of deformations on the electron spectra of crystals [in Ukrainian with summary in English]. Ukr. fiz. zhur. 3 no.2:232-238 Mr-Ap '58. (MIRA 11:6)

1. Institut fiziki URSR.
(Crystals--Spectra) (High pressure research)

24(6) SOV/57-23-10-26/40

AUTHORS: Broude, V.L., Yeremenko, V.V., Medvedev, V.S.

TITLE: Spectra of Photoconductivity Excitation and of Luminescence of CdS Crystals (Spektry vozbuzhdeniya fotoprovodimosti i lyuminestsentsii kristallov CdS)

PERIODICAL: Zhurnal tekhnicheskoy fiziki, Vol 28, Nr 10, pp 2263-2265 (USSR)

ABSTRACT: In order to analyze the relation between the photoconductivity and the luminescence of CdS crystals a joint investigation of the spectra of photoconductivity excitation and of luminescence at 20°K was carried out. According to the experience gained the crystal samples could be categorized as follows: 1) First group: The diagrams obtained showed an approximative coincidence of the maxima of the curves describing the spectral distribution of photoconductivity and of the spectra of green luminescence. 2) Second group: The two spectra mentioned exhibit a pronounced divergence. 3) Third group: This group is distinguished by an intense orange luminescence. The information collected leads to the following conclusions: 1) The photoconductivity of CdS crystals and the green luminescence are closely related. The excitation spectra of some samples coincide. 2) A divergence between the

Card 1/3

Spectra of Photoconductivity Excitation and of Luminescence of CdS Crystals

spectral distribution of photoconductivity and the curve describing the dependence of the intensity of green luminescence upon the wavelength of the exciting light (group 2) is, as a rule, observed, if a sharp decline of photosensitivity occurs towards smaller wavelengths. 3) On the strength of the fact that the two curves in question do not agree with each other, the conclusion is drawn that the absorption of CdS crystals is, at least in the range of 20 600 - 20 800 cm^{-1}, of a mixed nature (Ref 3). A similar conclusion can also be drawn for the crystals of the first group. These samples yielded curves with coinciding peaks of the excitation and of the absorption. 4) Two kinds of excitation of the orange luminescence were discovered. This apparently indicates that two different kinds of luminescence are in existence in this range. Some crystals exhibit an orange luminescence accompanied by a green luminescence, causing an absorption in the range of 20 600 - 20 700 cm^{-1}. A more detailed analysis of the results will be presented in another paper. There are 2 figures and 3 references, 3 of which are Soviet.

Card 2/3

Spectra of Photoconductivity Excitation and of Luminescence of CdS Crystals

SOV/57-29-10-26/40

SUBMITTED: May 8, 1958

Card 3/3

SOV/120-59-1-28/50

AUTHORS: Babenko, V. P., Broude, V. L., Medvedev, V. S., Prikhot'ko, A. F.

TITLE: Methods and Apparatus for Low Temperature Optical and Spectral Studies (Metody i apparatura nizkotemperaturnykh opticheskikh i spektral'nykh issledovaniy)

PERIODICAL: Pribory i tekhnika eksperimenta, 1959, Nr 1, pp 115-120 (USSR)

ABSTRACT: Metallic cryostats for optical and spectral studies at liquid hydrogen and liquid helium temperatures have been developed by the present authors and are briefly described in this paper. The cryostats are designed for work on the absorption and luminescence of crystals in free and stressed state as well as for photoelectric low temperature studies. Figs 2 and 3 show the hydrogen and helium cryostats respectively. The cryostat shown in Fig 2 loses 1 litre of hydrogen in 18-20 hours. The cryostat shown in Fig 3 loses 1 litre of hydrogen in 30 hours or 1 litre of helium in 5 hours. Various attachments and specimen holders used in conjunction with these cryostats are shown in Figs 4-7. One of the features of the cryostats is their vacuum sealed windows of the type shown in Fig 1. The present cryostats are modified forms of the cryostats described by the present authors in Refs 6 and 7.

Card 1/2

SOV/120-59-1-28/50

Methods and Apparatus for Low Temperature Optical and Spectral Studies.

There are 7 figures and 8 references, of which 4 are Soviet, 1 is French and the rest are English.

ASSOCIATION: Institut fiziki AN USSR (Institute of Physics of the Academy of Sciences of the USSR)

SUBMITTED: January 3, 1958

Card 2/2

66449
SOV/20-129-3-16/70

~~24 (5), 24 (7)~~ 24.3500

AUTHORS: Broude, V. L., ~~Medvedev, I. S.~~

TITLE: On a New Possibility of Explaining the Dependence of the Luminescence Quantum Yield on the Excitation Wavelength

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 129, Nr 3, pp 533-535 (USSR)

ABSTRACT: The authors investigated the spectra of the excitation of solid anthracene solutions, the luminescence of which had been excited within the absorption range of anthracene. Styrene, which is transparent in the range of anthracene absorption, was used as a solvent. Two types of samples were produced. In the first case, the spectrum of the excitation of the luminescence of an anthracene solution was investigated in liquid styrene, after which the pumped-out ampule with the solution was put into a thermostat for polymerization. In the second case, merization of pure styrene was carried out under the same conditions, but anthracene was weighed-in into the ready polystyrene, which was heated until it was completely softened. The curves of the first diagram practically show the dependence of the luminescence quantum yield on the excitation wavelength. In this case the curves of

Card 1/3

On a New Possibility of Explaining the Dependence of the Luminescence Quantum Yield on the Excitation Wavelength

66449
SOV/20-129-3-16/70

the spectral distribution of the luminescence quantum yield for anthracene (dissolved in liquid styrene) for the same solution after polymerization and for the anthracene solution in the ready polystyrene is concerned here. These curves are indicative of the approximated constancy of the quantum yield for the entire investigated range of the spectrum, and a sharp decline is found only on the long wave edge. Luminescence excitation spectra of the solid polymerized anthracene solution in styrene have a sharply marked structure, which corresponds to the oscillation of the luminescence yield as a function of wave length excitation. In this case there is an anticorrelation between the luminescence quantum yield and the absorption coefficient within the individual bands. The structure found here in the luminescence quantum yield is connected neither with the non-active absorption of an uncontrollable impurity nor with the reabsorption of the luminescence light. The results obtained in the present paper indicate the following: In common polymerization the anthracene molecules in some way penetrate into the polystyrene chain. This is confirmed by special

Card 2/3

On a New Possibility of Explaining the Dependence of the Luminescence Quantum Yield on the Excitation Wavelength

experiments carried out by the authors. The character of the penetration just mentioned is, as yet, not clear. The structure of the quantum yield curve of luminescence can be explained not only according to the usual hypothesis of exciton migration to the surface of the crystal, but also by conceptions on special interactions between the molecule and the surrounding medium. The authors thank I. P. Dmitrenko for assisting in carrying out the chemical part of this investigation, and also A. F. Prikhot'ko and V. M. Buymistrov for taking part in the discussion of the present paper. There are 1 figure and 8 references, 4 of which are Soviet.

ASSOCIATION: Institut fiziki Akademii nauk USSR (Institute of Physics of the Academy of Sciences of the UkrSSR)

PRESENTED: May 25, 1959, by I. V. Obreimov, Academician

SUBMITTED: May 18, 1959

Card 3/3

MEDVEDEV, V.S

82548

S/181/60/002/007/028/042
B006/B060

24.7700

AUTHORS: Yeremenko, V. V., Medvedev, V. S.

TITLE: The Dependence of Photoconductivity and Intensity of Luminescence of Anthracene Crystals on the Wavelength of Exciting Light

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 7, pp. 1572-1575

TEXT: The mode of the spectral distribution of photoconductivity of anthracene single crystals is explained either by exciton diffusion effects (Ref. 1), or by free carrier diffusion (Ref. 2). Which view may be the right one, cannot be really clarified by an investigation of photoconductivity alone. A clarification is possible only by a simultaneous examination of the dependence of photoconductivity and of luminescence intensity on the wavelength of the exciting light. This was the aim of the work, and it was attained by comparing the diffusion lengths l in the formula of the dependence of the photocurrent I_{ph} on the absorption coefficient k of the exciting light: $I_{ph} = I_{\infty}/(1+1/kl)$, and in the formula

Card 1/3

The Dependence of Photoconductivity and Intensity of Luminescence of Anthracene Crystals on the Wavelength of Exciting Light

S/181/60/002/007/028/042
B006/B060

for the k dependence of the luminescence intensity: $I_{lum} = \beta \frac{I_o}{D} \frac{1}{\gamma} \frac{k+\gamma}{k+1/l}$; the l in the former formula may denote both the diffusion length of the excitons and that of the free carriers, while that in the latter formula concerns the excitons only. D is the exciton diffusion coefficient, $\gamma = (1/l)+(q/D)$, q is the radiationless annihilation rate, $\beta \leq 1$, I_o is the intensity of the exciting light, I_∞ is the photocurrent at $k = \infty$.

The form of the spectra was found to be greatly dependent on the surface state of the specimen; I_{ph} and I_{lum} were therefore measured on the same crystal: the former with a tube electrometer (sensitivity 5.10^{-15} a), the latter with a photoelectronic multiplier of the type ФЭУ-19 (FEU-19). Fig. 1 shows the measured frequency dependence of the luminescence intensity (empty circles) and of the photocurrent (full circles); the spectral distribution of the dimensionless absorption coefficient for unpolarized light in the anthracene crystal is also included in the figure for a comparison. Maxima of the absorption coefficient correspond to maxima in the photocurrent distribution and minima in the luminescence spectrum. Fig. 2

82548

The Dependence of Photoconductivity and Intensity of Luminescence of Anthracene Crystals on the Wavelength of Exciting Light

S/181/60/002/007/028/042
B006/B060

shows the luminescence intensity as a function of the absorption coefficient, and Fig. 3 the photocurrent as a function thereof. The exciton diffusion length l and q/D can be determined by the experiments; the values obtained experimentally are in good agreement with the theoretical values $l = 0.2 \cdot 10^{-4}$ cm and $q/D = 2 \cdot 10^{5}$ cm^{-1}. A calculation of the diffusion lengths based on the dependence of luminescence quantum yield and of the photocurrent on the absorption coefficient yields very similar values, and it may be concluded therefrom that the form of the spectral distribution of photoconductivity is characterized by the diffusion of excitons (and not of free carriers) to the surface of the molecular crystal. There are 3 figures and 7 references: 3 Soviet, 2 US, and 1 British.

ASSOCIATION: Institut fiziki AN USSR Kiyev
(Institute of Physics of the AS UkrSSR, Kiyev)

SUBMITTED: December 14, 1959

Card 3/3

BROUDE, V.L.; MEDVEDEV, V.S.

Luminescence of solid solutions of anthracene. Izv.AN SSSR.Ser. fiz. 24 no.5:549-552 My '60. (MIRA 13:5)

1. Institut fiziki AN USSR.
(Anthracene--Optical properties)

S/048/61/025/003/045/047
B104/B203

24,3500 (1137,1147,1395)

AUTHORS: Broude, V. L. and Medvedev, V. S.

TITLE: Dependence of the yield in "blue" luminescence of cadmium sulfide crystals at 20°K on the excitation wavelength

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, v. 25, no. 3, 1961, 430-433

TEXT: This paper was read at the 9th Conference on Luminescence (Crystal Phosphors) in Kiyev, June 20-25, 1960. In the experiments described, luminescence was excited by a diffraction monochromator with a dispersion of 3 A/mm. Fig. 1 shows the spectral dependence of the yield in green (Curve 1), red (Curve 2), and blue (Curve 3) luminescence of one of the specimens. The authors conclude from the results that in the CdS crystals investigated an increase in intensity of blue luminescence due to a change in wavelength of the exciting light is accompanied by a drop in intensity of luminescence in the other spectral ranges. A particularly distinct dependence of the intensity of blue luminescence on the absorption coefficient of the CdS crystals was found; the authors utilized this

circumstance to determine the absorption curve in the shortwave range. The absorption spectrum (shown in Fig. 2) of this crystal can be divided into three parts. Very narrow absorption bands with a polarization perpendicular to the $\vec{c}$-axis of the crystal lie in the range between 20400 and 20560 cm^{-1}. A little wider, intense absorption bands lie in the range between 20560 and 20780 cm^{-1}, and wide absorption bands in the range of up to 23000 cm^{-1}. In the second range, the polarizations of absorption bands are different, in the third range, they are poorly distinct (Fig. 2). Detailed data are given in Table 1. A change in intensity of absorption bands due to mechanical stresses in the crystal is also pointed out. In a discussion of these results, the similarity of absorption spectra with those of molecular crystals is mentioned; at the same time, it is stated that the CdS crystal takes an intermediate position between ion crystal and molecular crystal. There are 3 figures, 1 table, and 7 Soviet-bloc references.

ASSOCIATION: Institut fiziki Akademii nauk USSR (Institute of Physics of the Academy of Sciences UkrSSR)

S/250/62/006/002/006/007
I003/I203

AUTHOR: Dovnar, S. A., Medvedev, V. S. and Chepa, P. A.

TITLE: Intensified blast cleaning of metals by an abrasive suspension

PERIODICAL: Doklady Akademii Nauk Belaruskay SSR, v. 6, no. 2, 1962, 100–102

TEXT: A new method of blast cleaning is presented in which both the objects to be cleaned and the nozzle of the cleaning apparatus are immersed in a suspension of the abrasive. The advantage of this method is that several nozzles may be used simultaneously; this improves the efficiency of the process and eliminates the necessity of agitating the suspension. Data derived from investigations carried out at different working conditions and recommendations for the best use of this method are given. There are 2 tables and 1 figure

ASSOCIATION: Institut machinovedeniya i automatizatsii AN BSSR (Institute for Mechanisation and Automatisation of the AS BSSR)

SUBMITTED: April 17, 1961

Card 1/1

KAZACHEVSKAYA, T.V.; ARKHANGEL'SKAYA, V.A.; IVANOV-KHOLODNYY, G.S.; MEDVEDEV, V.S.; RAZUMOVA, T.K.; CHUDAYKIN, A.V.

Measurements of X-ray and ultraviolet radiations by means of thermoluminescent phosphor $CaSO_4$(Mn). Isk.sput.Zem. no.15: 71-80 '63. (MIRA 16:4)

(Atmosphere, Upper--Rocket observations)
(Radiation--Measurement)

L 15594-63 EWT(1)/EPF(n)-2/BDS AFFTC/ASD/ESD-3/SSD Pu-4 68
ACCESSION NR: AT3006861 S/2560/63/000/015/0071/0080 66

AUTHOR: Kazachevskaya, T. V.; Arkhangel'skaya, V. A.; Ivanov-Kholodnyy, G. S.; Medvedev, V. S.; Rozumova, T. K.; Chudaykin, A. V. 71

TITLE: Measurement of x- and ultraviolet radiation with thermoluminescent phosphorus $CaSO_4$ (Mn)

SOURCE: AN SSSR. Iskusst. sputniki Zemli, no. 15, 1963, 71-80

TOPIC TAGS: rocket investigation, solar ultraviolet radiation, solar radiation, thermoluminescent phosphorus, solar eclipse investigation, ionospheric penetrating radiation

ABSTRACT: A device based on the principle of recording short-wave radiation with $CaSO_4$ (Mn) thermoluminescent phosphorus has been developed by the Institut prikladnoy geofiziki (Institute of Applied Geophysics) to measure solar ultraviolet and x-radiation. The phosphorus stores up energy during irradiation and then reemits it in the visible region of the spectrum when heated. The brightness of the emission, as well as the total energy (light total), is proportional within broad limits to the energy of irradiation. It has been established that $CaSO_4$ (Mn) phosphorus is sensitive only to emission with wavelengths from 1 to 1300 Å and

Card 1/2

L 15594-63

ACCESSION NR: AT3006861 2

does not become saturated during irradiation intensity changes of even five orders. The phosphorus was used on a rocket to measure the intensity of penetrating radiation in the lower part of the ionosphere during the solar eclipse of 15 February 1961. Unlike the use of thermoluminescent phosphorus in rocket measurements in the U. S. A., where the phosphorus is reemitted in the laboratory after retrieval of the container, the phosphorus used in the test of 15 February 1961 was reemitted during the flight, thus reducing the error. Calibration measurement was performed in flight with the use of a constant-action etalon sample. The measurement error in determining the energy of UV radiation was 5%; for x-radiation it was 30%. The intensity of radiation at a height of 95 km was about 7×10^7 quanta cm^{-2} sec^{-1}, while at a height of 67 km it was 500 times lower. This radiation exceeds the theoretically computed maximal solar x-radiation by 50 to 100 times. "The authors thank S. V. Repolovskiy for help in developing the device and carrying out tests and also T. A. Krasnovaya for preparing calibrated luminescent substances." Orig. art. has: 4 tables, 3 figures, and 8 formulas.

ASSOCIATION: none

SUBMITTED: 10May62 DATE ACQ: 29Jul63 ENCL: 00

SUB CODE: AS NO REF SOV: 014 OTHER: 007

Card 2/2

ASTAFOV, Yu.M. (Moskva); MEDVEDEV, V.S. (Moskva)

Statistical characteristics of noise resulting from level quantization. Avtom.i telem. 24 no.2:164-171 F '63. (MIRA 16:1)

(Automatic control) (Information theory)

ANTONOVA, [illegible]; [illegible]-KH[illegible], [illegible]; [illegible]; [illegible]

Measurement of fluxes of soft electrons in the upper atmosphere by means of a secondary-electron multiplier. Kosm. [illegible] [illegible]-28 Ja-F 1965. [illegible]

ROZLOVSKIY, A.I.; ROYZEN, I.S.; MEDVEDEVA, V.S.

Limits of the ignition of ethylene and oxygen mixtures with carbon dioxide additives. Khim. prom. 41 no.10:754-756 O '65. (MIRA 18:11)

L 27648-66 EWP(c)/EWP(k)/EWT(d)/EWT(m)/EWP(h)/ETC(m)-6/EWA(d)/EWP(l)/EWP(v)/EWP(t)/
ACC NR: AP6018520 ETI IJP(c) JD SOURCE CODE: UR/0381/65/000/006/0035/0040 44 B
AUTHOR: Bogdanov, V. A.; Krasyuk, S. V.; Medvedev, V. S.; Sokolinskaya, I. G.

ORG: Base Isotope Laboratory, Donetsk Sovnarkhoz (Bazovaya izotopnaya laboratoriya Donetskogo sovnarkhoza)

TITLE: Automatic device for the hardness inspection of cast-iron nipples 14 14

SOURCE: Defektoskopiya, no. 6, 1965, 35-40

TOPIC TAGS: cast iron, hardness, pig iron, magnetic property, magnetization, nondestructive test/KCL-36 pig iron

ABSTRACT: A study of the relationship of magnetic properties of cast iron nipples made of pig iron KCh-36 to hardness is described. A description of the design and electrical circuit of the device is presented.

Cast nipples made of pig iron KCh-36, made by the Lugan Foundry and Machinery Plant, for connecting radiator sections of a heating system, are usually obtained with differing hardness (Bhn 100-500). During subsequent machining, considerable wear, putting the cutting instrument out of action, and sometimes breakdown of the lathes occur. Experience of the plant has shown that a nipple hardness over Bhn 170-180 should not be machined. However there are no methods which would permit the complete processing of the great quantity (50,000 pieces/day).

Card 1/2 UDC: 620.179.14

L 27648-66

ACC NR: AP6018520

An automatic device has been developed for the hardness testing of 3,000 nipples/hour at the Nondestructive Testing Division of the Base Isotope Laboratory, Donets Sovnarkhoz.

The study has shown that there is a well-defined relationship between magnetic properties and hardness of cast-iron nipples.

The most suitable characteristic for testing nipple hardness is residual magnetization since it is averaged over the entire nipple.

Magnetometry is the most suitable method of measuring residual magnetization. Orig. art. has 6 figures and 1 table. [JPRS]

SUB CODE: 13, 11, 20 / SUBM DATE: 01Sep65/ ORIG REF: 002/ OTH REF: 001

Card 2/2 CC

ACCESSION NR: AP4031872 S/0286/64/000/007/0065/0065

AUTHOR: Repolovskiy, S. V.; Chudaykin, A. V.; Kazachevskaya, T. V.; Lishanov, A. Ya.; Medvedev, V. S.

TITLE: A method of measuring the energy of shortwave radiation from the sun as well as that of artificial sources in the region of the spectrum below 1350A. Class 42, No. 161506

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 7, 1964, 65

TOPIC TAGS: radiation detector, solar radiation detector, shortwave radiation energy, light filter, shortwave radiation detector, ultraviolet radiation detector

TRANSLATION: 1. The method proposed in this author's certificate for measuring the shortwave radiation energy of the sun or of an artificial source at wavelengths shorter than 1350A involves the use of rockets, satellites, and space craft. In order to obtain data immediately upon measurement of radiation, a previously irradiated plate coated with $CaSO_4(Mn)$ is moved into position behind the window of the light detector, the plate is heated, and the readings

Card 1/2

ACCESSION NR: AP4031872

of the light receiver are transmitted to earth.

2. The method described in 1, with the added feature whereby the same plate can be used many times. Upon conclusion of data-taking, the plate is moved away from the field of view of the light receiver, the plate is cooled, and then it is returned to the window.

3. The method described in 1 and 2 with the added feature whereby radiation in different regions of the spectrum can be measured. This is realized by moving filters, having the desired relationship between their transmission coefficients and wavelength to be measured, into position behind the radiation window.

ASSOCIATION: none

SUBMITTED: 13Jul62	DATE ACQ: 29Apr64	ENCL: 00
SUB CODE: SD, SP	NO REF SOV: 000	OTHER: 000

Card 2/2

MEDVEDEV, V.V.

Discussion on A.G. Dembo's article "On investigation of the respiratory function of sport medicine". Klin.med., Moskva 29 no.2:82-83 Feb 51. (CLML 20:7)

1. Of the Hospital Therapeutic Clinic (Head--Prof. N.S. Molchanov), Military Medical Academy imeni S.M. Kirov.

MEDVEDEV, V.V.

Studies on external respiration in circulatory insufficiency. Ter. arkh., Moskva 25 no.2:27-32 Mar-Apr 1953. (CIML 24:3)

1. Candidate Medical Sciences. 2. Of the Military Medical Academy imeni S. M. Kirov.

ANTELIDZE, B.F., kandidat meditsinskikh nauk; MEDVEDEV, V.V., kandidat meditsinskikh nauk

Observations of external respiration following physical exertion in circulatory insufficiency. Terap.arkh. 28 no.2:3-9 '56. (MIRA 9:7)

1. Iz gospital'noy terapevticheskoy kliniki (nach.- chlen-korrespondent AMN SSSR prof. N.S.Molchanov) Voyenno-meditsinskoy ordena Lenina akademii imeni S.M.Kirova.

(CARDIOVASCULAR DISEASES, physiology,
eff. of exercise on resp. (Rus))
(RESPIRATION, in various diseases,
cardiovasc. dis., eff. of exercise (Rus))
(EXERCISE, effects,
on resp. in cardiovasc. dis. (Rus))

MEDVEDEV V. V.

MEDVEDEV, V.V., kand.med.nauk (Leningrad)

Therapeutic use of oxygen inhalations; effects of oxygen inhalations on the level of incompletely oxidized products in the blood. Klin. med. 35[i.e.34] no.1 Supplement:16-17 Ja '57. (MIRA 11:2)

1. Iz kafedry gospital'noy terapevticheskoy kliniki (nach. - chlen-korrespondent AMN SSSR prof. N.S.Molchanov) Voyenno-meditsinskoy ordena Lenina akademii imeni S.M.Kirova.
(BLOOD--ANALYSIS AND CHEMISTRY)
(OXYGEN--THERAPEUTIC USE)

KOROSTOVTSEV, S.B., kand.med.nauk, mayor med.sluzhby; MEDVEDEV, V.V., kand.med.nauk, podpolkovnik med. sluzhby.

Tolerance to physical stress. Voen.-med. zhur. no. 2:59-63 F '61. (MIRA 14:2)

(STRESS (PHYSIOLOGY)) (FATIGUE)

GABEL', K.N.; MEDVEDEV, V.V.

Method for measuring the rotation speed of an oil centrifuge rotor. Sbor.trud.Az NII NP no.4:170-172 '59. (MIRA 15:5)
(Lubrication and lubricants—Additives) (Centrifuges)

OSTROUSHKO, I. A., prof.; YEMEKEYEV, V. T., dotsent; BOBIN, Ye. G., inzh.; MEDVEDEV, V. V., inzh.; KOBAKHIDZE, V. N., inzh.; KRIVCHIKOV, P. F., inzh.; CHUGUNOV, L. F., inzh.; MASTRYUKOV, M. V., inzh.

Improving mechanized charging of blastholes. Izv. vys. ucheb. zav.; gor. zhur. no.9:92-96 '61. (MIRA 15:10)

1. Severokavkazskiy gornometallurgicheskiy institut. Rekomendovana kafedroy [illegible] dela.

(Blasting)

ANDREYEV, Ye.T.; KONDRAT'YEV, L.I.; VAKHROMOV, P.S.; MEDVEDEV, V.V.; SAKANTSEV, Yu.S.

Rapid concreting of underground crushing machine foundations. Shakht. stroi. 6 no.3:20-23 Mr '62. (MIRA 15:3)

1. Sverdlovskiy gornyy institut (for Andreyev). 2. Trest Sverdlovskshakhtorudstroy (for Kondrat'yev, Vakhromov, Medvedev, Sakantsev).
(Crushing machinery--Foundations) (Concrete construction)

KAZARINOV, Valentin Makarovich, doktor tekhn.nauk; KATANOV, Mikhail Ivanovich, inzh.; MEDVEDEV, Valer'yan Vasil'yevich, inzh.; MEDLIN, Rogvalod Yakovlevich, inzh.; TROFIMOV, Sergey L'vovich, inzh.; FIL'KOV, Nikolay Iosifovich, inzh.; SAZONOV, A.G., inzh., red.; KHITROV, P.A., tekhn.red.

[Railroad rolling stock] Podvizhnoi sostav zheleznykh dorog. Moskva, Vses.izdatel'sko-poligr.ob"edinenie M-va putei soobshcheniia, 1960. 367 p. (MIRA 13:12)
(Railroads--Rolling stock)

MEDVEDEV, V.V.; MISHCHENKO, V.V.; CHUMAKOV, I.D.

Scraper removal of rocks in sinking horizontal prospecting drilling of small sections. Uch.zap. SAIGIMSa no.10:141-148 '63.(MIRA 17:2)

ACCESSION NR: AR4020485 S/0081/64/000/001/N060/N060

SOURCE: RZh. Khimiya, Abs. 1N380

AUTHOR: Ostroushko, I. A.; Medvedev, V. V.

TITLE: The feasibility of planning explosives for specific mining and geological conditions

CITED SOURCE: Tr. Severokavkazsk. in-ta, vy*p. 16, 1961, 190-194 gornometallurg.

TOPIC TAGS: ammonium nitrate explosive, blast mining, mining explosive, explosive characteristic, explosive

TRANSLATION: The author reviews the characteristics of ammonium nitrate explosives. Optimal efficiency in blasting operations can be attained not only by varying the amount and order of placement of explosives in the rock to be blasted but also by proper selection, i.e. planning, of explosives for specific blasting conditions. B. Lur'ye

DATE ACQ: 18Feb64 SUB CODE: CH ENCL: 00

Card 1/1

L 5191-66 EWT(d)/EWT(m)/EWP(w)/EWP(v)/T-2/EWP(k)/EWA(h)/ETC(m) WW/EM

ACC NR: AP5025064 SOURCE CODE: UR/0286/65/000/016/0108/0108

AUTHORS: Medvedev, V. V.; Feofanov, V. A.; Mitin, I. I.

52
B

ORG: none

TITLE: Ultrasonic hydrodynamic emitter. Class 42, No. 174017

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 108

TOPIC TAGS: ultrasonic equipment, hydrodynamic shock, nozzle

ABSTRACT: This Author Certificate presents an ultrasonic hydrodynamic emitter of the vortex type, following that of Author Certificate No. 161980. To increase the intensity of the elastic oscillations at large distances from the exit nozzle and to generate electrohydrodynamic shocks in the body of the emitter, a central electrode is added to the equipment. The nozzle serves as the second electrode for the emitter (see Fig. 1).

Card 1/2 UDC: 534.232:532.595.2

0901 0771

L 5191-66

ACC NR: AP5025064

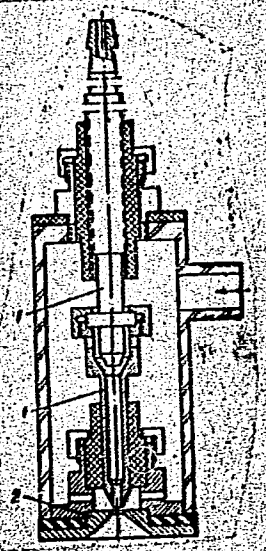


Fig. 1. 1- central electrode; 2- nozzle

Orig. art. has: 1 figure.

SUB CODE: IE/

SUBM DATE: 16Jul64

Card 2/2

ZELICHENOK, B.Yu., inzh.; BABITSKIY, M.S., inzh.; VARNAVSKIY, I.N., inzh.; KOVYNEV, M.V., inzh.; MEDVEDEV, V.V., inzh.; ZASLAVSKIY, A.Ya., inzh.

Influence of cross rolling on the quality of 16GN and 17GS steel sheets. Stal' 25 no.8:825-828 S '65. (MIRA 18:9)

1. Orsko-Khalilovskiy metallurgicheskiy kombinat i Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii.

3(0) SOV/20-123-2-38/50

AUTHORS: Medvedev, V. Ya., Korolyuk, I. K.

TITLE: The Age Problem of the Old Strata in the Kirgizskiy and Talasskiy Mountain Ranges of Northern Tyan'-Shan' (K voprosu o vozraste drevnikh tolshch Kirgizskogo i Talasskogo khrebtov Severnogo Tyan'-Shanya)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 2, pp 346-349 (USSR)

ABSTRACT: Since the strata mentioned in the title contain few organic remains, the authors of this work concentrate on the stratigraphic succession of suites, whose age has remained unclear. Maps (scale of 1 : 100 000) compiled during the period 1953-57 have shown that the sections of metamorphic complexes in both of the mountain ranges mentioned are sharply distinct from each other, and, indeed, in the case of thickness as well as of composition of the sediments. The surface of the Kirgizskiy Mountain Range and the east peak of the Talasskiy Ala-Tau are selected as Kirgizskaya structural facies zones. In contrast, the largest part of the Talasskiy Ala-Tau region belongs to another structural zone, which is called Talasskaya. The rocks of the

Card 1/4

The Age Problem of the Old Strata in the Kirgizskiy and Talasskiy Mountain Ranges of Northern Tyan'-Shan'

metamorphic complex of the Kirgizskaya zone form a large Makbal'skiy (Ref 3) anticlinorium. In the structure of its old masses a clear zone distribution is discernable: 1) Makbal'-skaya, 2) Nel'dinskaya, 3) Kaindinskaya, 4) Kenkol'skaya, 5) Karaarchinskaya. V. A. Nikolayev (Ref 3) assigned the suites 1-3 to the Lower Proterozoic and the remaining 2 to the Upper Proterozoic. Contrary to his opinion, the authors find 2 large interruptions in sedimentation: a) Between suites 3 and 4, and b) Between suites 4 and 5. The section of the first suite is concordant from the Uchkoshoyskaya suite continuously upward. The first author, along with N. A. Chekalina, collected stromatolithes from the latter and the Kenkol'skaya suite on the Dzhel'dysu River in 1956-57. The authors select 6 suites, after T. A. Dodonova (Ref 2), from the old masses of the Talasskaya structural zone: 1) Karakul'dzhinskaya, 2) Uzunakhmatskaya, 3) Sarydzhonskaya, 4) Chatkaragayskaya, 5) Kyzyl-bel'skaya, and 6) Kurganskaya. The rocks of suites 1 and 2 are correlated with the Kenkol'skaya suite of the Kirgizskaya zone. Nikolayev considers the upper 4 suites as

The Age Problem of the Old Strata in the Kirgizskiy and Talasskiy Mountain Ranges of Northern Tyan'-Shan'

Precambrian also and correlates them with the Algonkian of North America. The first author, A. V. Grigor'yev, and G. N. Bazhenova collected stromatolithes in the drainage area of the Kurgan and the southern Bala-Chichkan Rivers in 1957. These were identified by the second authoress. The study of the stromatolithes is still at a stage where no age determinations can be made on the basis of them. Nevertheless, the difference between the individual types of stromatolithes from various suites is striking. The following are described: Columnacollenia talassica Koroljuk (Fig 2: 4,5) and Col. calciolada Kor. (Fig 2: 1-3). There are 2 figures and 4 references, 3 of which are Soviet.

ASSOCIATION: Institut nefti Akademii nauk SSSR (Petroleum Institute of the AS USSR)

PRESENTED: April 29, 1958, by S. I. Mironov, Academician

AUTHORS: Burtman, V.S. and Medvedev, V.Ya. SOV/11-59-1-12/16

TITLE: New Data on the Age of the Aramsu Suite of the Northern Tien Shan (Novyye dannyye o vozraste Aramsinskoy svity severnogo Tyan'-Shanya)

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geologicheskaya, 1959, Nr 1, pp 113-116 (USSR)

ABSTRACT: The age of the Aramsu suite (composed of volcanogenous-sedimentary formations) in the basin of the Susamyr river (the Kirgiz SSR), identified by V.G. Mukhin in 1930s and later also found by Kozerenko on the southern slope of the Kirgiz ridge of mountains, could not be exactly fixed at that time, due to the absence of fossilized fauna. The fossils of fauna have now been found there, and identified as belonging to the Ordovician period. This indicates that the Aramsu suite was formed in the Upper-Ordovician period of the Paleozoic era. The following scientists are mention-

Card 1/2

SOV/11-59-1-12/16

New Data on the Age of the Aramsu Suite of the Northern Tien Shan

ed by the author: V.A. Nikolayev, D.M. Shteynma, V.S. Burtman, I.P. Pugacheva, N.V. Litvinovich, E.N. Yanov, A.V. Grigor'yev and A.M. Obut. There is 1 map and 2 Soviet references

ASSOCIATION: Vsesoyuznyy aerogeologicheskiy trest Ministerstva geologii i okhrany nedr SSSR (The All-Union Aero-Geological Trust of the Ministry of Geology and Conservation of Mineral Resources), Moscow

SUBMITTED: May 22, 1957

Card 2/2

VASIL'YEV, V.G.; GRACHEV, G.I.; NEVOLIN, N.V.; OZERSKAYA, M.L.; PODOBA, N.V. Prinimali uchastiye: ALEKSEYCHIK, S.N.; GUSHKOVICH, S.N.; DIKENSHTEYN, G.Kh.; DZVELAYA, M.F.; DRABKIN, I.Ye.; IVANOVA, M.N.; KAZARINOV, V.P.; KALININA, V.V.; KOZLENKO, S.P.; MEDVEDEV, V.Ya.; PUSTIL'NIKOV, M.R.; ROSTOVTSEV, N.N.; SKOBLIKOVA, G.I.; STEPANOV, P.P.; TITOV, V.A.; FOTIADI, E.E.; CHIRVINSKAYA, M.V.; SHMAROVA, V.P. GRATSIANOVA, O.P., red.; BEKMAN, Yu.K., vedushchiy red.; MUKHINA, E.A., tekhn.red.

[Manual for geophysicists in four volumes] Spravochnik geofizika v chetyrekh tomakh. Moskva, Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry. Vol.1. [Stratigraphy, lithology, tectonics, and physical properties of rocks] Stratigrafiia, litologiia, tektonika i fizicheskie svoistva gornykh porod. Pod red. O.P. Gratsianovoi. 1960. 636 p. (MIRA 14:1)
(Petroleum geology) (Gas, Natural--Geology)

MEDVEDEV, V.Ya.; STEPANOV, P.P.

Density of the old formations in the western Tien Shan [with summary in English]. Sov. geol. 3 no.10:81-98 O'60. (MIRA 13:10)

1. Trest Aerogeologiya, Vsesoyuznyy nauchno-issledovatel'skiy institut geofizicheskikh metodov razvedki.
(Tien Shan--Geology, Structural)

MEDVEDEV, V. Ya.

Cand Geol-Min Sci - (diss) "Stratigraphy and tectonics of the Pre-Cambrian and Lower Paleozoic Deposits of the western part of the Northern T'ien-Shan." Moscow, 1961. 23 pp; 1 page of tables; (Moscow State Univ imeni M. V. Lomonosov, Geology Inst of the Academy of Sciences USSR); number of copies not given; price not given; (KL, 6-61 sup, 203)

MEDVEDEV, [illegible]

[illegible] formations of the [illegible] of [illegible] and the western part of [illegible] Tien Shan. Izv. vys. ucheb. zav.; geol. i razv. 6 no.5: [illegible] My '63. (MIRA 18:10)

1. Moskovskiy [illegible] institut imeni Ordzhonikidze.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001033310007-3"

MEDVEDEV, Ya. G.

PHASE I BOOK EXPLOITATION SOV/4948

Gel'fer, Gesel' Ayzikovich, Aleksandr Vladimirovich Ivanov, and Yakov Grigor'yevich Medvedev

Vzryvozashchishchennoye elektrooborudovaniye: spravochik dlya rabotnikov neftepererabatyvayushchey i gazovoy promyshlennosti (Explosionproof Electrical Equipment: Manual for Oil-Refinery and Gas-Industry Workers) Leningrad, Gostoptekhizdat, 1960. 328 p. Errata slip inserted. 4,100 copies printed.

Ed.: V. Ye. Ul'yashchenko; Tech. Ed.: P. S. Frumkin; Executive Ed.: P. S. Dolmatov.

PURPOSE: This manual is intended for engineers and technicians working in oil refineries and in the gas industry, and may be useful to personnel in other industries where the hazard of gas or dust explosion exists.

COVERAGE: The manual contains the specification and description of explosionproof electric machines, apperatus, and devices manufactured by Soviet industry. Data on classification of locations by the degree of

Card 1/13

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001033310007-3"

[illegible]DEV, Yu.I., Cand Tech Sci—(diss) "Study [illegible] d- [illegible] tures [illegible] ~~[illegible]tion~~ manufacture of ~~[illegible]~~ casing forms." [illegible] , [illegible] shift [illegible] space [illegible], TsBNTI [illegible] of Heavy Industry, 195[illegible], [illegible] pp

([illegible] Sci Res Inst of Planning under Gosplan USSR. Central Sci Res Inst of Technology and Machine Building (TsNIITMash)), 1[illegible] copies ([illegible], [illegible], 14[illegible])

MEDVEDEV, Ya. I.

Solidification of Metals; (~~Sbornik~~) Trans. of 2nd Conf. on ~~1956~~ Theory of Foundry Processes, 1956. Moscow, Mashgiz, 1958, 532pp.

Card 7/8

AUTHOR: Medvedev, Ya. I. SOV-128-58-8-7/21

TITLE: The Formation of Seams on Large and Heavy Castings, and the Calculation of Pouring Speed Taking Into Consideration the Cooling of the Liquid Metal in the Mold (Obrazovaniye spayev na krupnykh i tyazhëlykh otlivkakh i raschët skorosti zalivki s uchëtom okhlazhdeniya zhidkogo metalla v forme)

PERIODICAL: Liteynoye proizvodstvo, 1958, Nr 8, pp 12-13 (USSR)

ABSTRACT: Heavy steel and iron casts with a weight of 5-50 tons and a specific weight of 0 6-1.5 tons per m^3, have usually thin walls of 15-32 mm and are characterized by the formation of seams during casting. The casting process usually lasts 5-6 min and the seams are caused by the different level of metal in various parts of the mold. The peculiarities of these molds, are the base for an intensive heat exchange between the metal and the mold. At the present time, the casting systems are calculated by a formula taken from hydraulics. The cooling of the liquid metal as a factor in metal casting has been investigated. The solidification of the metal in the mold can cause various defects (Figure 1). Seams appear usually in those parts of the mold, most

Card 1/2

The Formation of Seams on Large and Heavy Castings, and the Calculation of Pouring Speed Taking Into Consideration the Cooling of the Liquid Metal in the Mold

distant from the feeders. These defects may be prevented, if the heat supplied by the liquid metal compensates for the heat loss to the mold. The values for the rise of the metal level in the mold are given in Table 1. The kinetics of the filling of the mold and the cooling process of the metal is important for the prevention of seams and other defects. There are 3 sets of diagrams, 4 graphs, and 3 tables.

1. Steel--Casting 2. Iron--Casting 3. Liquid metals--Cooling

SNULOVA, L.D.; MEDVEDEV, Ya.I.; CHEVELEVA, A.A.

Efficient use of wood pitches in the preparation of the PS-1 binder for shell molds. Gidroliz. i lesokhim.prom. 11 no.7:6-9 '58. (MIRA 11:11)

1. TSentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya (for Snulova, Medvedev). 2. Syavskiy lesokhimicheskiy kombinat (for Cheveleva).
(PITCH) (BINDING MATERIALS)

BERG, P.P.; MEDVEDEV, Ya.I.

Gas processes in the foundry mold. Lit.proizv. no.7:30-35 Jl '61. (MIRA 14:7)
(Gases in metals) (Foundries—Equipment and supplies)

VALISOVSKIY, I.V., kand. tekhn. nauk; MEDVEDEV, Ya.I., kand. tekhn. nauk; TKACHENKO, K.M., kand. tekhn. nauk, retsenzent; CHERNYAK, O.V., inzh., red.; MAKAROVA, L.A., tekhn. red.

[Technological testing of molding materials] Tekhnologicheskie ispytaniia formovochnykh materialov. Moskva, Mashgiz, 1963. 222 p. (MIRA 16:7)

(Sand, Foundry—Testing)

BERG, P.P. (SSSR); MEDVEDEV, Ya.I. [Medvedev, Ya.I.] (SSSR)

Gases in castin molds. Slevarenstvi 11 no8/9:305-308
Ag '63.

MEDVEDEV, Ya.I., kand. tekhn. nauk

Prospects of the automation of casting in pressed moulds. Trakt. i sel'khozmash. no.9:32-34 S '64. (MIRA 17:11)

MEDVEDEV, Ya.I., kand. tekhn. nauk; SHKLENNIK, Ya.I., kand. tekhn. nauk, retsenzent; VALISOVSKIY, I.V., kand. tekhn. nauk, red.

[Gases in the foundry mold] Gazy v liteinoi forme. Moskva, Mashinostroenie, 1965. 238 p. (MIRA 18:9)

TALANOV, P.I.; KVASHA, F.S.; MELVEDEV, Ya.I.

Strength factors of the zone of moisture condensation in green molds. Lit. proizv. no.1:27-28 N '54. (MIRA 7:8)

MEDVEDEV, Ya.V.

Chikhezy brown coal deposit in the Maritime Territory. Sov.geol. 1 no.9:167-168 S '58. (MIRA 12:2)

1. Primorskoye geologicheskoy upr-.leniye.
(Maritime Territor-—Lignite)

L 8953-66 EWT(m)/EWP(t)/EWP(k)/EWP(b)/EWA(c) JD/HW

ACC NR: AP5026492 SOURCE CODE: UR/0286/65/000/019/0025/0026

AUTHORS: Ivanov, P. N.; Sil'vestrov, L. D.; Medvedev, Ye. A.

ORG: none

TITLE: Electrohydraulic shock recorder. Class 21, No. 175084

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 19, 1965, 25-26

TOPIC TAGS: electrohydraulic effect, recording equipment

ABSTRACT: This Author Certificate presents an electrohydraulic shock recorder. For contactless recording of electrical signals utilizing the method of the creation of high pressure in the interior of a liquid with an electrical discharge, the recorder is in the form of a reservoir with inking liquid and which terminates in a capillary tube with sealed-in electrodes in the bulged part (see Fig. 1). The electrodes are connected through a spark gap to the output of a modulator with a high voltage oscillator controlled by the received signal.

Card 1/2 UDC: 621.397.331.52

L 8953-66

ACC NR: AP5026492

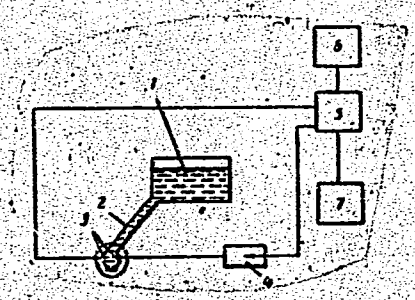


Fig. 1. 1 - Reservoir with inking liquid;
2 - capillary;
3 - electrodes;
4 - spark gap;
5 - modulator;
6 - oscillator;
7 - amplifier.

Orig. art. has: 1 diagram.

SUB CODE: 09, 13/ SUBM DATE: 10Sep62

BVK

Card 2/2

MEDVEDEV, Ye.I., inzh.

Investigating the [illegible] inverse extrusion. Sbor. [illegible]

ALEKSANDROV, A.D.; MEDVEDEV, Ye.K.; BAKHTOVA, K.K.; LEVCHUK, K.V., red. izd-va; TSAGURIYA, G.M., tekhn.red.

[Collection of commercial treaties and commercial and payment agreements as well as long-term agreements of the U.S.S.R. with foreign states as of Janurary 1, 1961] Sbornik torgovykh dogovorov, torgovykh i platezhnykh soglashenii i dolgosrochnykh torgovykh soglashenii SSSR s inostrannymi gosudarstvami na 1 ianvaria 1961 goda. Moskva, Vneshtorgizdat, 1961. 623 p. (MIRA 14:11)

1. Russia (1923- U.S.S.R.) Ministerstvo vneshney torgovli. Dogovorno-pravovoye upravleniye.
(Commercial treaties)

KOVRIGIN, S.D., kand.tekhn.nauk; OSIPOV, G.L., kand.tekhn.nauk; MEDVEDEV, Ye.K., inzh.

Studying the noise of urban passenger transportation. Gor.khoz. Mosk. 35 no.5:31-32 My '61. (MIRA 14:6)
(Moscow--Noise)

MEDVEDEV, Ye.K., inzh.; SALTYKOV, V.V., inzh.

Fixing brake linings with glue. Nov.tekh.zhil.-kom.khoz.: Gor.dor.-most.khoz. i transp. no.3:71-80 '63. (MIRA 17:10)

BEREZIN, B.I., otv. red.; KOZANOVITSKIY, L.A., red.; MEDVEDEV, Ye.M., red.; POPOVA, A.L., red.; POPKADUKHIN, P.A., red. SEMENOV, S.S., red.; SOPOVA, O.I., red.

[Transactions of the Conference on the Scientific Basis of the Processes of Printing and Methods for Their Improvement] Trudy Konferentsii po nauchnym osnovam protsessov pechataniia i putiam ikh sovershenstvovaniia, Moskva, Nauchno-tekhn. ob-vo poligr. i izdatel'stv. No.1. 1961. 44 p. (MIRA 18:5)

1. Konferentsiya po nauchnym osnovam protsessov pechataniya i putyam ikh sovershenstvovaniya, Moscow, 1961.

MEDVEDEV, YE. S.

"Pathogenesis of the Pulmonary Heart (Effect of Emphysema on the Pulmonary Circulation), "Klin. Med., 26, No. 5, 1948. Mbr., Faculty Therapeutic Clinic of Sanitation & Hygiene, 1st Moscow Order of Lenin Med. Inst., -c1948-.

MEDVEDEV, Ye. S.

"Artificial Deposition of Blood in the Extremities and Its Importance in the Therapeutic Clinic." Dr Med Sci, Ryazan' Medical Inst, Ryazan', 1953. (RZhBiol, No 2, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

MEDVEDEV, Ye.S., professor

Interruption of paroxysmal tachycardia following hyperemia of the extremities. Terap.arkh. 28 no.5:43-46 '56. (MLRA 9:10)

1. Iz kafedry propedevtiki vnutrennikh bolezney Ryazanskogo meditsinskogo instituta imeni I.P.Pavlova.

(TACHYCARDIA, PAROXYSMAL, therapy,
Bier's hyperemia (Rus))
(HYPEREMIA,
Bier's hyperemia, ther. of paroxysmal tachycardia (Rus))

MEDVEDEV, Ye.S., prof. (Ryazan')

First aid in attacks of angina pectoris. Klin.med. 34 no.8: 65-68 Ag '56. (MIRA 12:8)

1. Iz kafedry propedevtiki vnutrennikh bolezney Ryazanskogo meditsinskogo instituta imeni akad. I.P.Pavlova (dir. - prof. L.C.Sutulov).

(ANGINA PECTORIS, ther.
binding of extremities in severe attacks)

IVANOVA, A.A.; KRISTAL'NYY, V.S.; FALUNIN, A.F.; MEDVEDEV, Ye.S., otvetstvennyy red.; KOKOSOV, L.V., red.; MAZEL', Ye.I., tekhn. red.

[Interurban telephone stations] Mezhdugorodnye telefonnye stantsii. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1958. 377 p. (Telephone stations) (MIRA 11:8)

MEDVEDEV, Ye.S.

Communication workers of the Russian Federation are fighting for progress in the field of communications. Vest.sviazi 20 no.1: 20-22 Ja '60. (MIRA 13:5)

1. Zamestitel' ministra svyazi RSFSR.
(Telecommunication) (Postal services)

MEDVEDEV, Ye.S.

Reinforced concrete struts and pillars in wire communications.
Vest.sviazi 20 no.3:18-21 Mr '60. (MIRA 13:6)

1. Zamestitel' ministra svyazi RSFSR.
(Electric lines--Poles)

MEDVEDEV, Ye.S.

Persistently eliminate the shortcomings in the service to the public.
Vest. sviazi 22 no.2:17-19 F '62. (MIRA 15:2)

1. Zamestitel' ministra svyazi RSFSR.
(Telecommunication)